UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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MIRROR WORLDS TECHNOLOGIES, LLC,

                    Plaintiff,

          - against -

FACEBOOK, INC.,

                    Defendant.

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17-cv-3473 (JGK)

MEMORANDUM OPINION &
ORDER

JOHN G. KOELTL, District Judge:

Mirror Worlds Technologies, LLC, has filed this lawsuit against Facebook, Inc., alleging that three systems within Facebook's well-known social media website -- "News Feed," "Timeline," and "Activity Log" -- violate three patents owned by Mirror Worlds.[1] Mirror Worlds's patents protect a system for organizing electronic data in a time-ordered stream of information. The technology protected by Mirror Worlds's patents has two necessary components relevant to this dispute: (1) a "main stream" or "main collection" and (2) "substreams" or "subcollections." Facebook moves for summary judgment pursuant to Rule 56 of the Federal Rules of Civil Procedure, arguing that the undisputed facts demonstrate that neither the News Feed, the

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[1] Mirror Worlds originally claimed that three additional features of Facebook -- "Events," "Search," and "Ticker" -- also infringed the patents-in-suit but Mirror Worlds has withdrawn its claims as to those three features rather than defending them in response to the current motion for summary judgment. Summary judgment should therefore be granted dismissing those claims.

Timeline, nor the Activity Log have a "main stream" or a "substream" and therefore that Facebook's systems do not infringe the patents-in-suit. While the parties dispute the proper construction of certain terms in the claims in the patents-in-suit, including "main stream" and "substream," those disputes do not affect the dispositive issues on this motion.

As explained in more detail below, after considering the parties' tutorials, claim construction briefs, and summary judgment briefs, and after hearing oral argument, it is plain that Mirror Worlds cannot establish that any of the Facebook systems at issue contains a "main stream" within the meaning of the patents-in-suit. Facebook's motion for summary judgment is therefore **granted**.

I.

A.

Summary judgment may not be granted unless "the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c); see also Celotex Corp. v. Catrett, 477 U.S. 317 (1986); Univ. of Colo. Found., Inc. v. Am. Cyanamic Co., 196 F.3d 1366 (Fed. Cir. 1999). The trial court's duty at the summary judgment motion stage of the litigation is merely to discern "whether there are disputed material facts;"

it does not extend to resolving any such disputes. SunTiger, Inc. v. Scientific Research Funding Grp., 189 F.3d 1327, 1333 (Fed. Cir. 1999); see also Lemelson v. TRW, Inc., 760 F.2d 1254, 1260 (Fed. Cir. 1985) ("For summary judgment, fact-finding is an inappropriate exercise . . . ."). The moving party bears the initial burden of "informing the district court of the basis for its motion" and identifying the matter that "it believes demonstrate[s] the absence of a genuine issue of material fact." Celotex, 477 U.S. at 323. Where the nonmoving party bears the burden of proof, summary judgment is appropriate if the moving party can show "that there is an absence of evidence to support the nonmoving party's case." Id. at 325. The substantive law governing the case will identify those facts which are material and "only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986).

In determining whether summary judgment is appropriate, a court must resolve all ambiguities and draw all reasonable inferences against the moving party. See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986) (citing United States v. Diebold, Inc., 369 U.S. 654, 655 (1962)). If the moving party meets its burden, the burden shifts to the nonmoving party to come forward with "specific facts showing a

genuine issue for trial." Fed. R. Civ. P. 56(e)(2). The

nonmoving party must "point to an evidentiary conflict created

on the record," and may not rely only on "mere denials or

conclusory statements." Armco, Inc. v. Cyclops Corp., 791 F.2d

147, 149 (Fed. Cir. 1986); see also Applied Cos. v. United

States, 144 F.3d 1470, 1475 (Fed. Cir. 1998) ("It is well

settled that 'a conclusory statement on the ultimate issue does

not create a genuine issue of fact.'") (quoting Imperial Tobacco

Ltd. v. Philip Morris, Inc., 899 F.2d 1575, 1581 (Fed. Cir.

1990)). With respect to the issues on which summary judgment is

sought, if there is any evidence in the record from any source

from which a "reasonable inference" could be drawn "in favor of

the non-movant," summary judgment is improper. Roche Palo Alto

LLC v. Apotex, Inc., 531 F.3d 1372, 1377 (Fed. Cir. 2008); see

also Hypoxico, Inc. v. Colo. Altitude Training, LLC, No. 02-cv-

6191, 2008 WL 4129269, at *1-2 (S.D.N.Y. Sept. 4, 2008).

B.

Infringement analysis is a two-step process: "The first

step is determining the meaning and scope of the patent claims

asserted to be infringed. The second step is comparing the

properly construed claims to the device accused of infringing."

Markman v. Westview Instruments, Inc., 52 F.3d 967, 976

(Fed. Cir. 1995) (en banc) (citation omitted), aff'd 517 U.S.

370; see also N. Am. Container, Inc. v. Plastipak Packaging, Inc., 415 F.3d 1335, 1344 (Fed. Cir. 2005).

Claim construction, the first step in infringement analysis, is a matter of law. See Markman, 52 F.3d at 979. Courts determine the scope of a claim by applying well-known principles of claim construction and examining three relevant sources: the language of the claim, the specification, and the prosecution history. See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996). See generally Phillips v. AWH Corp., 415 F.3d 1303, 1312-17 (Fed. Cir. 2005).

The language of a claim provides the starting point in a claim construction analysis. See Phonometrics, Inc. v. NO Telecom Inc., 133 F.3d 1459, 1464 (Fed. Cir. 1998). "Absent a special and particular definition created by the patent applicant, terms in a claim are to be given their ordinary and accustomed meaning." Renishaw PLC v. Marposs Societa' Per Azioni, 158 F.3d 1243, 1249 (Fed. Cir. 1998). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention . . . ." Phillips, 415 F.3d at 1313. The specification, however, is also highly relevant to the claim construction analysis, because it is the best guide to the meaning of a disputed term. Id. at 1315 (citing Markman, 52 F.3d at 978). A court in its discretion may

consider extrinsic evidence including expert and inventor testimony, dictionaries, and learned treatises, although the Court of Appeals for the Federal Circuit has indicated that extrinsic evidence is less significant than the intrinsic record and that the Court should discount expert testimony that is clearly inconsistent with the construction of the claim indicated by the written record. Phillips, 415 F.3d at 1317-19.

With respect to the second step of infringement analysis, literal infringement requires that the accused device embody every limitation of a claim. See Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed. Cir. 1995). If the parties only dispute claim construction and do not dispute relevant facts concerning the structure and operation of the accused products, "the question of literal infringement collapses into claim construction and is amenable to summary judgment." Gen. Mills, Inc. v. Hunt-Wesson, Inc., 103 F.3d 978, 983 (Fed. Cir. 1997); see also Mymail, Ltd. v. Am. Online, Inc., 476 F.3d 1372, 1378 (Fed. Cir. 2007). This second step of infringement analysis is a question of fact, and therefore summary judgment on a claim of literal infringement issue is appropriate "when no genuine issue of material fact exists, in particular, when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device." Bai v. L & L Wings, Inc.,

160 F.3d 1350, 1353 (Fed. Cir. 1998); see also Hypoxico, Inc.,

2008 WL 4129269, at *2-3 (footnote omitted).

II.

The following facts are undisputed unless otherwise noted.

A.

This case involves three patents owned by Mirror Worlds --

U.S. Patent No. 6,006,227 (the "'227 Patent"), U.S. Patent No.

7,865,538 (the "'538 Patent"), and U.S. Patent No. 8,255,439

(the "'439 Patent"). Def.'s 56.1 Stmt. ¶ 1. The patents-in-suit

protect a technology originally developed in the early 1990s

that organizes electronic information in a time-ordered stream

rather than in a conventional hierarchical directory of folders.

Def.'s 56.1 Stmt. ¶¶ 4-9. The three patents-in-suit overlap in

substantial part. Each contains two elements relevant to this

dispute -- a "main stream" and a "substream."

1.

The claims in the '227 Patent and the '538 Patent both

include a "main stream" limitation. See Def.'s 56.1 Stmt. ¶¶ 35,

37. A "main stream" is "a stream that is inclusive of every data

unit received by or generated by the computer system." Def.'s

56.1 Stmt. ¶ 37; Pl.'s 56.1 Stmt. ¶ 37.[2] A "stream" is "a time-

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[2] The parties agree that this correct definition of "main stream"
applies to the '227 Patent, and Facebook contends that a "main stream"
within the meaning of the '538 Patent has the same meaning. Mirror
Worlds would define a "main stream" in the '538 Patent slightly
differently as a "stream that is inclusive of every document received

ordered sequence of data units that functions as the diary of a person or an entity's electronic life and has three main portions: past, present, and future." Def.'s 56.1 Stmt. ¶ 20; Pl.'s 56.1 Stmt. ¶ 20.[3]

The '439 Patent refers to a "main collection" limitation rather than a "main stream" limitation, although the '439 Patent describes the protected system as a "time-ordered stream[] of information items or assets." Def.'s 56.1 Stmt. ¶ 40; see Def.'s 56.1 Stmt. ¶ 43. Facebook contends that "main collection" in the '439 Patent has the same definition as "main stream" in the '227 Patent and the '538 Patent. Def.'s 56.1 Stmt. ¶ 43. Mirror Worlds contends that "main collection" in the '439 Patent has a different definition from that of "main stream." However, Mirror Worlds does not contest that the "main stream" limitation in the '227 Patent and the '538 Patent and the "main collection"

by or generated by the computer system." Def.'s 56.1 Stmt. ¶ 37; see Pl.'s 56.1 Stmt. ¶ 37. The distinction between Mirror Worlds's "every document" construction for a "main stream" in the '538 Patent and Facebook's "every data unit" construction for a "main stream" in the '538 Patent is immaterial for the present motion. See Pl.'s 56.1 Stmt. ¶ 62 ("A 'document' as used in the asserted claims can contain any kind of data."). Therefore, for purposes of this motion, the Court construes "main stream" to have the same definition in both the '227 Patent and the '538 Patent.

[3] The parties agree that this is the correct definition for "stream" in the '227 Patent, and Facebook contends that it should also be the definition for "stream" in the '538 Patent and the '439 Patent. Mirror Worlds urges the same meaning for "stream" in the '538 Patent and the '439 Patent but would replace "data units" with "documents." As with the "main stream" definition, "document" versus "data unit" is a distinction without a difference for purposes of this motion. Therefore, for purposes of this motion, the Court construes "stream" to have the same definition in all three patents-in-suit.

limitation in the '439 Patent present identical issues for purposes of this motion. Indeed, counsel for Mirror Worlds conceded at the argument of the present motion that the differences between the parties' claim constructions do not affect the decision of this motion. See Tr. of Oral Arg. at 62-64.

Thus, all three patents-in-suit include, in substance, the following limitation: the technology must include a "main stream," which is a time-ordered sequence of data units that is inclusive of every data unit received by or generated by the computer system.

2.

The claims in the '227 Patent and the '538 Patent both include a "substream" limitation. Def.'s 56.1 Stmt. ¶ 48. A "substream" is "[a] subset of data units yielded by a filter on the main stream, the filter identifying certain data units within the main stream that also remain in the main stream." Def.'s 56.1 Stmt. ¶ 48; Pl.'s 56.1 Stmt. ¶ 48.[4] The '439 Patent refers to "subcollections" rather than "substreams" but, as with

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[4] The parties largely agree that this is the correct definition for "substream" in the '227 Patent, and Facebook contends that a "substream" within the meaning of the '538 Patent has the same meaning while Mirror Worlds replaces "data units" with "documents" for the '538 Patent. Def.'s 56.1 Stmt. ¶ 48. As with the "main stream" and "stream" definitions, "document" versus "data unit" is a distinction without a difference for purposes of this motion. Therefore, for purposes of this motion, the Court construes "substream" to have the same definition in both the '227 Patent and the '538 Patent.

"main collection" and "main stream," "subcollections" and "substreams" present identical issues for purposes of this motion. The Court construes "subcollection" to have the same meaning as "substream," as Facebook suggests.

Thus, all three patents-in-suit also include, in substance, the following limitation: the technology must include a "substream," which is a time-ordered sequence of data units that are a subset of data units drawn only from the main stream.

B.

Facebook is a well-known social media website. Facebook is comprised of multiple systems. Pl.'s 56.1 Stmt. ¶¶ 67-68. Four of Facebook's systems are relevant to this dispute, three of which Mirror Worlds accuses of infringing the patents-in-suit. The three Facebook systems accused of infringing the patents-in-suit are "News Feed," "Timeline," and "Activity Log." These are user-facing systems that display online content. Bronson Decl. ¶¶ 5-13. The fourth Facebook system relevant to this dispute is known as "TAO," which stands for "The Association of Objects." "TAO" serves as Facebook's principal behind-the-scenes data storage and organization system. See Bronson Decl. ¶¶ 4, 20.

1.

One of the Facebook systems relevant to this dispute is "TAO." Mirror Worlds does not accuse "TAO" of infringing the patents-in-suit but Facebook contends that "TAO" is critical to

understanding why none of Facebook's systems infringe the patents-in-suit.

"TAO" is the principal backend data storage and organization system for Facebook. "TAO" stores two types of information for Facebook -- objects and associations. Objects comprise the content posted on a Facebook webpage. Associations are types of interactions between objects. In almost every case when a user posts data on a Facebook webpage, the objects and associations that comprise much of the information the user sees on the Facebook webpage are information stored in "TAO." Bronson Decl. ¶¶ 21-23.

For example, consider a user who posts a "check in" post, in which a user posts the user's current physical location on Facebook. That post contains at least three objects: (1) the type of post, in this case a "check in" post, (2) the identity of the user who posted the "check in" post, and (3) the location of the "check in" post. If the user "tags" other users to the "check in" post by linking to the other users' Facebook pages, then each of those "tags" is also an object. The interactions between all these objects, such as which user authored the post, which user tagged another user, and which user was tagged by another, are the associations. Much of these objects and associations would be stored in "TAO." Bronson Decl. ¶¶ 24-25.

Some of the content in "TAO" has a timestamp while other content in "TAO" does not; in any event, the information stored in "TAO" is not organized by time. Although the content drawn from "TAO" may be organized in time order when displayed to a Facebook user on a Facebook website, such as "News Feed" when organized by "Most Recent" posts or "Timeline," that content is not organized in time order when stored by Facebook in "TAO." Bronson Decl. ¶¶ 27-39. Mirror Worlds does not allege that "TAO" infringes the patents-in-suit.

2.

"News Feed" is one of the accused Facebook systems.

"News Feed" is the default webpage for most Facebook users. It displays content on Facebook, such as photographs, videos, links, "check in" posts, and text posts, that may be relevant to the viewing user. This content may be generated by the viewing user, by other users to whom the viewing user is connected on Facebook, or by sponsors who pay for content. The "News Feed" also displays interactions between users on a single post. For example, User 1 may post a comment on a photograph that had been posted on Facebook by User 2, and both the comment and the photograph may be viewed on the "News Feed" for User 3 if User 3 is connected to User 1 and/or User 2. The viewing user may also interact with content posted by other users by commenting on or "Liking" that content. Bronson Decl. ¶¶ 6-9 & Fig. 1. The posts

on "News Feed" can be organized by time by selecting to view the "Most Recent" posts. Pl.'s 56.1 Stmt. ¶¶ 84-90.

The content a user sees on the "News Feed" page comes from a backend system known as the "Multifeed System" and "TAO." The "Multifeed System" is an independent store of user data that determines what may be included in a user's "News Feed." The "Multifeed System" is independent of "TAO," although it receives information from "TAO." Bronson Decl. ¶ 21; Vickery Dep. at 16, 35-37. The "Multifeed System" is comprised of three parts -- the "Multifeed Leaves," the "Multifeed Tailer," and the "Multifeed Aggregator." Bronson Decl. ¶ 21; Pl.'s 56.1 Stmt. ¶¶ 91-98.

The "Multifeed Leaves" are servers that store indexes for the actions and objects that appear on a user's "News Feed." See Vickery Dep. at 15-16. All of the information for all of the objects and actions that might appear on "News Feed" is indexed on the "Multifeed Leaves." The indexes on the "Multifeed Leaves" are organized by time. Pl.'s 56.1 Stmt. ¶¶ 99-129. As counsel for Mirror Worlds conceded at the argument of this motion, the "Multifeed Leaves" are indexes of metadata, rather than the complete item that may eventually be presented to a user. See Tr. of Oral Arg. at 33; see also Vickery Dep. at 16.

The "Multifeed Tailer" is the means by which the indexes for actions and objects are written to the "Multifeed Leaves." Each action and object written from the "Multifeed Tailer" to

the "Multifeed Leaves" includes a time stamp. Pl.'s 56.1 Stmt. ¶¶ 133–34.

The "Multifeed Aggregator" is a system that accumulates the relevant information indexed on the "Multifeed Leaves" to be displayed on a given user's "News Feed." Queries from the "Multifeed Aggregator" to the "Multifeed Leaves" include a time value. Pl.'s 56.1 Stmt. ¶¶ 130–32. Because the "Multifeed Leaves" store only indexes for information rather than the information itself, the "Multifeed Aggregator" draws the actual content that is indexed by the "Multifeed Leaves" from "TAO," and receives information from "TAO," and then posts that information on the "News Feed." Bronson Decl. ¶ 21; Vickery Dep. at 16, 50.

Thus, for example, when a user needs to retrieve a picture from the user's "News Feed," a query for that picture is sent to the "Multifeed Aggregator," which uses the index for the picture that was originally written by the "Multifeed Tailer" and stored in the "Multifeed Leaves" to draw the actual content of the picture from "TAO" and then post the picture on "News Feed" to satisfy the query.

3.

"Timeline" is also an accused Facebook system.

"Timeline" is a website that displays to other Facebook users content that is focused on a particular Facebook user. The

content on a user's "Timeline" is generated principally by the user to whom the "Timeline" is dedicated, although the "Timeline" also displays interactions, such as "Likes" or comments, that other users have with the content posted on the user's "Timeline." Bronson Decl. ¶¶ 10-11 & Fig. 2; Pl.'s 56.1 Stmt. ¶¶ 135-41.

"Timeline" displays data using a backend system (the "Timeline Backend system") that is similar to the backend system for "News Feed." A system called "TimelineDB" indexes actions and objects for "Timeline" in a time-ordered stream. A "Timeline Aggregator" receives queries from the user who calls up a "Timeline" webpage and retrieves the indexes for the user's "Timeline" from "TimelineDB." The "Timeline Aggregator" then answers the query by drawing the indexed content from "TAO." Bronson Decl. ¶ 21; Pl.'s 56.1 Stmt. ¶¶ 145-79; Huang Dep. at 77-78, 156.

4.

"Activity Log" is the final accused Facebook system.

"Activity Log" displays for a user a list of posts pertaining to that user. "Activity Log" lists posts that are contained on "Timeline." It reorganizes those posts by the viewing user in a time-ordered stream and in a manner that is not viewable by other users on Facebook. "Activity Log" generates posts using the same backend system as "Timeline,"

including "TimelineDB" and "TAO." Bronson Decl. ¶¶ 12-13, 21 &

Fig. 3; Pl.'s 56.1 Stmt. ¶¶ 180-91.

III.

Facebook argues that the undisputed facts demonstrate that

Facebook's systems do not infringe the patents-in-suit.

A.

The infringement analysis for the patents-in-suit proceeds

in three steps. First, Mirror Worlds must identify and define a

"computer system" in which the allegedly infringing technology

is housed. Second, Mirror Worlds must demonstrate that the

"computer system" contains a "main stream" by establishing that

all of the data received by or generated by the "computer

system" is organized in a time-ordered stream. And third, Mirror

Worlds must demonstrate that there is at least one "substream,"

which is a time-ordered stream of data derived from the "main

stream." No reasonable juror could find that Mirror Worlds has

satisfied the second step, the existence of a "main stream."

Mirror Worlds has identified two separate alleged "computer

systems" in this case. See Pl.'s Sur-Reply at 2. With respect to

"News Feed," Mirror Worlds alleges that the "computer system" is

the "Multifeed System" that directs the content that appears on

a Facebook user's "News Feed" page. And with respect to

"Timeline" and "Activity Log," Mirror Worlds alleges that the

"computer system" is the "Timeline Backend system," inclusive of

"TimelineDB" and "Timeline Aggregator." Mirror Worlds does not allege that "TAO" is part of either "computer system."

Mirror Worlds has failed to demonstrate that each "computer system" it identifies contains a "main stream" or "main collection." With respect to the alleged "Multifeed System," Mirror Worlds alleges that the "Multifeed Leaves" are the "main stream"; and with respect to the "Timeline Backend system," Mirror Worlds argues that "TimelineDB" is the "main stream." See Pl.'s Sur-Reply at 2-3. But a "main stream" must have two characteristics: (1) all of the data in the "main stream" must be organized in time order and, critically, (2) all of the data received by or generated by the computer system must be contained in the "main stream." See Def.'s 56.1 Stmt. ¶¶ 20, 37; see Pl.'s 56.1 Stmt. ¶¶ 20, 37. The second requirement is not met here -- the "Multifeed Leaves" do not contains all of the information received by the "Multifeed System," and neither does "TimelineDB" contain all of the information received by the "Timeline Backend system." As explained above, when the "Multifeed Aggregator" receives a query, it looks to the "Multifeed Leaves" for the indexes of the content to be displayed on "News Feed" and then the "Multifeed Aggregator" receives the actual data that was indexed on the "Multifeed Leaves" from "TAO" to satisfy the query. Likewise, when the "Timeline Aggregator" receives a query, it looks to "TimelineDB"

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for the indexes of the content to be displayed on "Timeline" or "Activity Log" and then the "Timeline Aggregator" receives the actual data that was indexed on "TimelineDB" from "TAO" to satisfy the query. Thus, the aggregator elements of both the "Multifeed System" and the "Timeline Backend system" receive information from "TAO," which is not stored in the alleged "main streams" of the "Multifeed Leaves" and "TimelineDB." Mirror Worlds has therefore failed to demonstrate that Facebook's systems contain a "main stream" or "main collection." There is an absence of evidence to show that Facebook's systems contain a "main stream" or "main collection."

Whether the Facebook "computer systems" identified by Mirror Worlds contain "substreams" within the meaning of the patents-in-issue cannot be determined on this motion for summary judgment because the issue has not been developed sufficiently. In an answer to a Facebook interrogatory, Mirror Worlds identified the alleged infringing "substream" as "the user-related information that appears in at least Facebook's Newsfeed, Timeline, Events, Activity Log, Graph Search, and search features." Ex. 8 to Keefe Decl. at 4. In the original motion for summary judgment, while Facebook referred to the requirement in the patents-in-suit for a "substream," the lack of such a "substream" was not the topic of the arguments raised by Facebook. Rather, Facebook claimed that the lack of a

"computer system" or a "mainstream" within the meaning of the patents-in-suit doomed the infringement contentions by Mirror Worlds. Mirror Worlds did not discuss "substream" in its response.

In its reply, Facebook contended that Mirror Worlds had not identified a "substream" because the user-related information identified in the interrogatory response by Mirror Worlds included information from sources such as "TAO" that was not in the "computer systems" identified by Mirror Worlds and therefore failed to satisfy the limitations of the patents-in-suit. Mirror Worlds responded in its sur-reply by identifying a new "substream" -- "a list of actions and objects for News Feed, and a list of actions for Timeline and Activity Log." Pl.'s Sur-Reply at 4. While it is unclear how this definition is consistent with the original interrogatory response, because the existence of a "substream" was not the focus of the original motion for summary judgment and the arguments have not been developed, it is not possible to determine that summary judgment should be granted because of the lack of a "substream" in Facebook's accused systems.

Accordingly, while summary judgment cannot be granted at this point based on the absence of a "substream" in the accused systems, because of the absence of evidence to show that Facebook's accused systems contain a "main stream" or a "main

collection," Mirror Worlds has failed to demonstrate that

Facebook's systems infringe the patents-in-suit.

B.

As demonstrated above, "TAO" is an essential element of

Facebook's systems, including the specific "computer systems"

identified by Mirror Worlds and that distinguishes Facebook's

systems from the technology patented by Mirror Worlds. Mirror

Worlds attempts to explain away the significance of "TAO" in two

ways, neither of which is persuasive.

First, Mirror Worlds relies heavily on the fact that

Facebook witnesses stated in deposition testimony that "TAO" is

independent of the "Multifeed System" and the "Timeline Backend

system." See, e.g., Marra Dep. at 41 ("TAO and multifeed leaves

are different data storage systems."); Huang Dep. at 30-

31(explaining that the "TAO" database is "separate" from the

Timeline Backend system). But the independence of "TAO" does not

save Mirror Worlds's infringement contentions; it is what dooms

them. As the witnesses relied upon by Mirror Worlds explained in

their deposition testimony, the "Multifeed Aggregator" and the

"Timeline Aggregator" receive data from "TAO" to answer queries

for "News Feed," "Timeline," and "Activity Log." See, e.g.,

Marra Dep. at 43-44 ("[W]hen people query [News Feed], the query

initially goes through multifeed. Ultimately, more data is

retrieved from TAO to send to our user clients and then it's

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returned to user clients. . . . [I]n order for your phone to display the story, we need to retrieve the full text of the story and all of the comments on the story and, ultimately, those are retrieved from TAO."); Huang Dep. at 30-31 ("[T]he Timeline backend is useless without TAO . . . . For Timeline you need both. You need both the Timeline backend and you need TAO . . . ."). Therefore, the alleged "computer systems" receive data from an independent source (that is, "TAO") that is not part of an alleged "main stream" or "main collection" and that same independent source contributes data to the alleged "substreams" and "sub collections." The "main streams" identified by Mirror Worlds -- the "Multifeed Leaves" and the "TimelineDB" -- do not contain all of the data received by or generated by the "computer systems." That "TAO" is an independent source that contributes to the "computer systems" and to the "substreams" is one reason why Mirror Worlds's infringement claims fail in this case.

Second, Mirror Worlds tries to establish that there are issues of disputed fact with respect to whether "TAO" is time-ordered. The undisputed evidence shows that while some -- not all -- of the objects and associations stored in "TAO" have time stamps, "TAO" does not store data in time order. See Bronson Decl. ¶¶ 27, 31. Moreover, Mirror Worlds has not explained why it matters to this case whether "TAO" is organized in time

order. Mirror Worlds concedes that "TAO" is a source wholly apart from the alleged "computer systems" it has identified and the alleged "main streams," and therefore the contributions of "TAO" to the "Multifeed Aggregator," the "Timeline Aggregator," "News Feed," "Timeline," and "Activity Log" preclude an infringement claim in this case whether or not "TAO" is organized in a time-ordered stream.
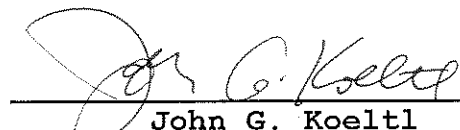
Accordingly, Mirror Worlds's attempts to downplay the significance of "TAO" are without merit.

CONCLUSION

The Court has considered all of the arguments raised by the parties. To the extent not specifically addressed, the arguments are either moot or without merit. For the foregoing reasons, Facebook's motion for summary judgment is **granted** on grounds of non-infringement. The Clerk is directed to enter judgment dismissing this case. The Clerk is also directed to close all pending motions and to close this case.

SO ORDERED.

Dated: **New York, New York**
         August 11, 2018

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John G. Koeltl
United States District Judge